

REMARKS

Claims 9 to 16 are pending in the application. Claims 9, 10 and 12 to 16 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Gebhardt et al. (US 3,994,370) in view of Pollinger (US 4,280,598) and Schwarz et al. (US 5,823,303). The term “brake chamber” in the claims was objected to as allegedly not being clearly understood. Claim 11 was objected to as being dependent upon a rejected base claim, but was indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Paragraphs [0003], [0004], [0008] to [0012], [0014], [0015], [0023], [0024], [0026] to [0028], [0030], [0032] and [0033] of the specification have been amended. The Abstract has been amended. Claims 9 to 12 and 14 have been amended.

Reconsideration of the application based on the following is respectfully requested.

35 U.S.C. 103(a) Rejections

Claims 9, 10 and 12 to 16 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Gebhardt et al. (US 3,994,370) in view of Pollinger (US 4,280,598) and Schwarz et al. (US 5,823,303).

Gebhardt shows a brake disk with two sleeves 13, 14 which are fixed together via a securing pin 12. See col. 2, lines 20 to 47.

Pollinger shows a brake disk with as sleeve 11.

Schwarz shows a brake disk with a cast pot 1 with pins 3 connected by welding or bonding or casting in.

Claim 9 as amended recites a method for manufacturing a cast brake disk, the method comprising:

providing at least two pairs of bodies, each pair including two bodies inserted into one another and movable with respect to one another along an axis of the pair;

disposing the at least two pair in a casting mold such that the respective axis of each pair is substantially radially aligned with respect to the brake disk;

disposing the casting core in a casting mold;

filling the casting mold with a liquid metal and cooling so as to provide a solidified cast brake disk;

removing the core from the solidified cast brake disk, wherein the at least two pair of bodies form joining elements of the cast brake disk between a brake disk hub and a friction ring, a first body of the pair of bodies being directly connected only to the friction ring and a second body of the pair of bodies being directly connected only to the brake disk hub.

Support for the amendment is found in Fig. 2 and the specification at [0026] for example.

None of the references show or teach “a first body of the pair of bodies being directly connected only to the friction ring and a second body of the pair of bodies being directly connected only to the brake disk hub” as now claimed.

Withdrawal of the rejections to claim 9 and its dependent claims therefore is respectfully requested.

Independent claim 14

Claim 14 recites: “A brake disk made of a cast material, comprising:

a brake disk chamber;

a friction ring;

at least two pair of bodies joining the brake disk chamber and the friction ring, wherein each pair includes a first body inserted into a second body, the first and second body being axially movable with respect to one another along a longitudinal axis of the pair oriented substantially radially with respect to the brake disk chamber and the friction ring, wherein one of the at least two pair adjoins the brake disk chamber and another of the at least two pair adjoins the friction ring.”

It is respectfully submitted that the asserted pair of bodies of Gebhardt, sleeves 13 and 14, for its brake disc, are not “axially movable with respect to one another.” In the barke disc of Gebhardt 13 and 14 are clearly fixed with respect to one another via securing pin 12. See col. 2, lines 20 to 34. In fact Gebhardt teaches away from such axially movability.

Withdrawal of the rejections to claim 14 and its dependent claims therefore is respectfully requested.

Claim Objections

The term “brake chamber” was allegedly not understood. It is asserted on page 2 of the Office Action that, from the drawings, it appears that this element is a hub.

Claims 9 to 12 and 14 have been amended as suggested by the Examiner to recite “hub” in place of “chamber” as used with or referenced to brake disk. The specification and Abstract have been amended accordingly for consistency and clarity.

Withdrawal of these objections to the claims therefore is respectfully requested.

Allowable Subject Matter

Claim 11 was objected to as being dependent upon a rejected base claim but was indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In light of the above, withdrawal of this objection to claim 11 is respectfully requested.

New Claims

New claims 17 to 19 depend from claim 9 and find support at [0026] and the original claims, for example, and are respectfully submitted as patentable at least for the reasons stated above.

CONCLUSION

It is respectfully submitted that the present application is in condition for allowance and applicants respectfully request such action.

If any additional fees are deemed to be due at this time, the Assistant Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

Respectfully submitted,
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